

Cyclopentene, 1-chloro-

Other names:	1-Chloro-1-cyclopentene
Inchi:	InChI=1S/C5H7Cl/c6-5-3-1-2-4-5/h3H,1-2,4H2
InchiKey:	UJUIJZWQFDQKHO-UHFFFAOYSA-N
Formula:	C5H7Cl
SMILES:	C1C=CCCC1
Mol. weight [g/mol]:	102.56
CAS:	930-29-0

Physical Properties

Property code	Value	Unit	Source
gf	43.88	kJ/mol	Joback Method
hf	-35.14	kJ/mol	Joback Method
hfus	6.60	kJ/mol	Joback Method
hvap	32.63	kJ/mol	Joback Method
log10ws	-2.31		Crippen Method
logp	2.293		Crippen Method
mcvol	78.390	ml/mol	McGowan Method
pc	4438.52	kPa	Joback Method
tb	387.20	K	NIST Webbook
tc	585.68	K	Joback Method
tf	204.45	K	Joback Method
vc	0.292	m ³ /kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	118.33	J/mol×K	375.32	Joback Method
cpg	162.52	J/mol×K	550.62	Joback Method
cpg	154.77	J/mol×K	515.56	Joback Method
cpg	146.50	J/mol×K	480.50	Joback Method
cpg	137.69	J/mol×K	445.44	Joback Method
cpg	128.31	J/mol×K	410.38	Joback Method
cpg	169.78	J/mol×K	585.68	Joback Method
dvisc	0.0003352	Paxs	375.32	Joback Method

dvisc	0.0004139	Paxs	346.84	Joback Method
dvisc	0.0005308	Paxs	318.36	Joback Method
dvisc	0.0007147	Paxs	289.88	Joback Method
dvisc	0.0010268	Paxs	261.41	Joback Method
dvisc	0.0016119	Paxs	232.93	Joback Method
dvisc	0.0028690	Paxs	204.45	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci9903071
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C930290&Units=SI

Legend

cp_g:	Ideal gas heat capacity
dvisc:	Dynamic viscosity
g_f:	Standard Gibbs free energy of formation
h_f:	Enthalpy of formation at standard conditions
h_{fus}:	Enthalpy of fusion at standard conditions
h_{vap}:	Enthalpy of vaporization at standard conditions
log₁₀ws:	Log ₁₀ of Water solubility in mol/l
log_p:	Octanol/Water partition coefficient
mc_{vol}:	McGowan's characteristic volume
pc:	Critical Pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume

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